Abstract

The invention provides a method to introduce a selected nucleic acid sequence into an airway epithelial cell that involves contacting the airway epithelial cell with a pseudotyped retrovirus that includes a glycoprotein in which a portion of an O-glycosylation region within the glycoprotein has been deleted and a retroviral capsid that includes the selected nucleic acid sequence. The invention also provides a method to reduce or eliminate the symptoms of cystic fibrosis in a mammal that involves contacting an airway epithelial cell of the mammal with a pseudotyped retrovirus that includes a glycoprotein in which a portion of an O-glycosylation region within the glycoprotein has been deleted and a retroviral capsid that includes a nucleic acid sequence that encodes a cystic fibrosis transmembrane regulator protein.

5

10

CERTIFICATE UNDER 37 C.F.R. 1.10:

The undersigned hereby certifies that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR §1.10 on the date indicated below and is addressed to the Mail Stop Patent Application, Assistant Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450

"Express Mail" mailing label number: EV073736961US

Date of Deposit: 26 March 2004